

Abstract of the Disclosure

A data network wherein network links have an assigned service weight and a restoration weight that are used as factors for respectively determining an optimum primary data path and a back-up data path through the network. The restoration path is used in the event of a failure of the primary service path and a Dijkstra or similar algorithm may be used for determining these paths. Service weights may be assigned to the links to prioritize finding the shortest possible path, whereas restoration weights may be assigned to the links to find a path with the maximum available capacity.